

GLOBAL INDOOR HEALTH NETWORK

WORKING TOGETHER FOR HEALTHY INDOOR ENVIRONMENTS
IN OUR HOMES, SCHOOLS AND BUSINESSES



June 1, 2015

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World Health Assembly Passes Resolution on Air Pollution

The World Health Assembly passed several “landmark resolutions and decisions.” Three new resolutions were passed (May 26, 2015): one on air pollution, one on epilepsy and one laying out the next steps in finalizing a framework of engagement with non-State actors.

Air pollution

Delegates at the World Health Assembly adopted a resolution to address the health impacts of air pollution – the world’s largest single environmental health risk. Every year 4.3 million deaths occur from exposure to indoor air pollution and 3.7 million deaths are attributable to outdoor air pollution. This was the first time the Health Assembly had debated the topic.

The resolution urges Member States to develop air quality monitoring systems and health registries to improve surveillance for all illnesses related to air pollution; promote clean cooking, heating and lighting technologies and fuels; and strengthen international transfer of expertise, technologies and scientific data in the field of air pollution.

The resolution asks the WHO Secretariat to strengthen its technical capacities to support Member States in taking action on air pollution. **This includes further building capacity to: implement the "WHO air quality guidelines" and "WHO indoor air quality guidelines; conduct cost-benefit assessment of mitigation measures; and advance research into air pollution’s health effects and effectiveness.**

Click [here](#) to read the press release. Click [here](#) to read the 2015 report from the WHO on the “Economic Cost of the Health Impact of Air Pollution in Europe.”

May 31 is World No Tobacco Day

WORLD NO TOBACCO DAY



Tobacco kills **1 person** every **6 seconds** in the world



In the Americas, tobacco kills some **1 million** people each year

Worldwide, nearly **5.4 million** active smokers and **600,000** people exposed to secondhand smoke die annually



A **third to one-half** of all smokers will die from a disease caused by tobacco



In poor families, tobacco spending can represent up to 10% of the family budget

See *Nightmare Flat Riddled with Mould* on page 2

Nightmare Flat Riddled with Mould (U.K.)

An East Grinstead man living in a mould-ridden "nightmare" of a flat says it is ruining his health – and claims his housing association is doing nothing.

Nathan Fisher, 22, from Charlswood Road told the Courier he reported problems to his landlord Affinity Sutton in January 2014 after damp and mould crept across his home.

The electrical and telecoms installation engineer, who has lived in the flat for four years, explained: "I tried to deal with it during the first six months."

"I got mould cleaner and washed it off the walls. Then I brought it to the attention of my housing association and their contractors."

"I have had three surveys, an electrician round and private damp specialists all doing surveys – and nothing has been done."

"They will not talk to me. I have made complaints. They show no concern. It is just a nightmare."

Mr. Fisher said he had considered himself to be a "pretty healthy guy" before the issues with his home, but he has now developed respiratory problems.

"They raise my rent every few months and expect me to pay in full. I have kept the windows open but whatever I do doesn't help."

Mr. Fisher thinks the housing association should treat its residents better. He said: "They don't care about their tenants. It is insulting and upsetting."

Click [here](#) to read the article.



Leaks in stucco system causing structural problems and mold in house built by Dominion Homes

Family Faced with Moldy Mess (Ohio)

A moldy mess lurking in the walls of a home made a family question an Ohio construction company.

Dominion Homes built thousands of houses in the Columbus suburbs, but ABC 6 Investigators exposed damage that home warranties won't cover.

Mold and water damage that's rotting walls, beams and the house frame, will cost way more than the Adams family says it can afford to clean it all up.

The plan for a kitchen remodel lead to the uncovering of mold spread across wall after wall and hiding behind the stucco in their Hilliard home.

"I was shocked and I'm still in shock," homeowner Jimmy Adams said. "This is structural damage because it's eating the wood."

Jimmy and Ashley Adams say the mold problem has forced the entire family to move out.

The couple's insurance company had a structural engineer inspect what they uncovered. **The report concluded the staining, rotting beams and mold was the result of leaks through the stucco wall system.**

They tried to get Dominion to fix the extensive problems. Dominion Homes responded to the Adams saying damage to a structural component due to factors like water intrusion are not covered under the limited structural warranty. Click [here](#) to read the article.

See *1000 Genomes Study* on page 3

The 1000 Genomes High-Throughput Screening Study

This [study](#) demonstrates how a large-scale systems biology experiment (toxicity phenotyping and genetic mapping) can aid translation to public health protection, and provides novel information about global interindividual variability. The availability of genetically diverse, genetically defined renewable human cell lines opens an opportunity for in vitro toxicity testing at the population scale.

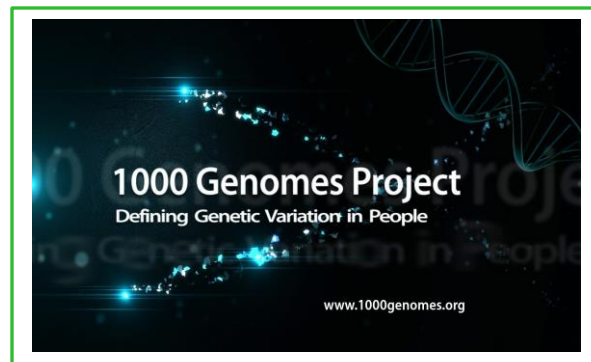
Background: Understanding of human variation in toxicity to environmental chemicals remains limited, so human health risk assessments still largely rely on a generic 10-fold factor (10½ each for toxicokinetics and toxicodynamics) to account for sensitive individuals or subpopulations.

Objectives: We tested a hypothesis that population-wide in vitro cytotoxicity screening can rapidly inform both the magnitude of and molecular causes for interindividual toxicodynamic variability.

Methods: We used 1,086 lymphoblastoid cell lines from the 1000 Genomes Project, representing nine populations from five continents, to assess variation in cytotoxic response to 179 chemicals. Analysis included assessments of population variation and heritability, and genome-wide association mapping, with attention to phenotypic relevance to human exposures.

Results: For about half the tested compounds, cytotoxic response in the 1% most “sensitive” individual occurred at concentrations within a factor of 10½ (i.e., approximately 3) of that in the median individual; however, for some compounds, this factor was > 10. Genetic mapping suggested important roles for variation in membrane and transmembrane genes, with a number of chemicals showing association with SNP rs13120371 in the solute carrier SLC7A11, previously implicated in chemoresistance.

Conclusions: This experimental approach fills critical gaps unaddressed by recent large-scale toxicity testing programs, providing quantitative, experimentally based estimates of human toxicodynamic variability, and also testable hypotheses about mechanisms contributing to interindividual variation.



Schools Should Stop Dousing Classrooms with Toxic Cleaning Products

What’s that smell in the air? It’s fresh and floral — and probably filled with formaldehyde.

It’s spring-cleaning time once again. **And in the name of cleanliness, people everywhere are dousing their homes and workplaces with dangerous, even toxic, cleaning products.**

Have you ever looked at the list of ingredients on the back of the cleaning bottle? Notice the warnings, often in all caps. “CAUTION: Keep away from children!” Or “DANGER: Avoid contact with skin, eyes, mucous membranes, and clothing.”

Most traditional cleaning products can contribute to serious health problems — from asthma to cancer to reproductive disorders.

The Environmental Working group evaluated 2,000 common cleaning products and found that over half contain ingredients known to harm the lungs alone. (Check out the EWG [report](#) on using greener cleaning supplies in schools and the EWG Cleaners Database Hall of Shame [report](#).)

Children are especially at risk. Unfortunately, America’s main chemical safety law — the Toxic Substances Control Act — makes it very difficult to ban dangerous chemicals, even those that are known to cause serious health effects.

That makes state action imperative. In 2012, Maryland became one of just 11 to pass a law mandating green cleaning in schools.

Click [here](#) to read the article.

See *Joplin’s Tornado-Proof Hospital* on page 4

Joplin's 'Tornado-Proof Hospital' A Model for the Future

Joplin's EF-5 tornado is the costliest single tornado in U.S. history, causing nearly \$3 billion dollars in damage.

A lot was lost, but a lot was also learned, including how to build a better, more storm-resistant hospital for the future.

It was hard to put into words how widespread the damage of the May 22, 2011, Joplin tornado was. Mile after mile there was nothing but destruction, including the hospital.

Now, four years later, Mercy has built a new \$465 million hospital, and its new tornado-proof construction is getting nationwide attention.

The tornado left 161 people dead and 7,000 homes leveled or damaged beyond repair.

Many thought the safest place in Joplin during the tornado would be St. John hospital, but with winds of up to 250 miles-per-hour, even it wasn't spared.

Mercy later faced the question of what to do long term, since the old hospital couldn't be saved.

They wanted a new hospital to be able to withstand a tornado, and 39 months later the new 900,000 square-foot facility is open.

The entire exterior is made of reinforced concrete panels.

During the tornado, the hospital's roof was ripped to shreds, turning materials into projectiles. The multi-layered roof on the new facility is much stronger.

"If you can protect the shell of the building, to prevent the damage from coming inside, then you have a good chance of keeping everyone inside safe," Manley said.

Mercy also worked with a manufacturer to create specially designed windows. In the lobbies, they're rated for 110 mile-per-hour wind. The strongest ones are in the ICU, and can withstand 250 mile-per-hour wind. They're also covered in a plastic laminate film.



Joplin's 'Tornado-Proof Hospital' A Model for the Future (continued)

Inside, there are hurricane-rated doors, each floor has a fortified safe zone with reinforced walls and ceilings and stairwells and critical life support systems have battery backups.

The new hospital also has crucial supplies stashed away in places on every floor in the facility, like shovels and crowbars, in case they're needed to clear debris from hallways.

Above ground, the new hospital is impressive. Below ground there's an impressive investment in another part of the project.

Underground, 20 feet underground, a tunnel runs one and a half football fields, and connects the hospital to its physical plant. The bunker protects all critical utilities, like electric lines and communications, which were all wiped out in the 2011 tornado.

"We actually have two sources of normal power, one from the north and south. So if we actually get hit from either side, we still have all the power we need from the other direction," said Farnen.

Mercy is looking at implementing the fortified tornado construction into other facilities in tornado-prone areas.

Hospitals in Oklahoma, and nationwide, are also looking at the construction techniques used in Joplin, according to Farnen.

Click [here](#) to read the article.

See *Court Revives Hurricane Wilma Claim* on page 5

Court Revives Hurricane Wilma Damage Claim (Florida)

An appeals court has ordered a new trial in a dispute about Citizens Property Insurance Corp.'s decision to deny a water-damage claim filed more than three years after Hurricane Wilma hammered South Florida in October 2005.

Condominium-unit owner Edie Laquer filed the claim in 2009 after mold and other water damage was discovered in a wall. The unit, which had been rented to a tenant, was not directly damaged by Hurricane Wilma, but a neighbor's unit had been flooded, according to Wednesday's ruling by the 3rd District Court of Appeal.

The state-backed Citizens denied the claim, pointing to a policy requirement to provide "prompt" notice of claims and the more than three years that had elapsed after the hurricane.

Laquer contended she had no way of knowing about the damage until 2009.

A Miami-Dade County circuit judge sided with Citizens in finding that Laquer failed to provide prompt notice, and a jury also ruled for the insurer on the related issue of whether Citizens had been prejudiced by the late notice.

But a three-judge panel of the appeals court ordered a new trial, finding that "issues of fact exist concerning when a reasonable and prudent person would believe that a potential claim for damages" might occur.

"Contrary to Citizens' contention, the hurricane itself was not necessarily the event that would trigger the notice requirement, given the absence of apparent damage to any of Laquer's property following the storm," said the 11-page ruling, written by Judge Thomas Logue and joined by judges Vance Salter and Ivan Fernandez. "Contrary to Laquer's suggestion, her duty to provide notice under the policy was not necessarily triggered when she became aware of the full extent of the damage or when she determined that Hurricane Wilma was the cause of the damage."

Click [here](#) to read the article.



Mystery Water Damage Forces Family from Home (Colorado)

A family in LaSalle no longer has a livable home for a reason that remains unclear.

The house, located on CR 44, was badly damaged by a consistent overflow of water. The owner of the home, Amber Davis, said the water started to appear April 17.

Davis dug five-foot-deep trenches across the front yard with hopes of keeping water from causing further damage to the home. However, that wasn't enough and now home assessors deemed the home unlivable.

The ground beneath the home is saturated and dangerous, according to Weld County officials.

Davis claims the issues began when the Poudre Valley Rural Electric Association installed pipes next to her house.

A representative with the electric coop confirmed recent water pump installations, but said the pipes were resealed two times. The latest repair was made Wednesday.

The overflow of water hasn't stopped, and officials from the Poudre Valley REA and Weld County still don't know where it's coming from. County officials said they have never seen anything like this before.

Click [here](#) to read the article.

Mold Problems in Governors' Mansions

Many states have had problems with mold in their governor's mansions. The following list provides a few examples.

GIHN note: State officials will take care of these mold problems in governors' mansions, but they won't help residents of the state when they have mold problems in their homes, schools and businesses.

Alaska. Click [here](#) to read about mold in the Alaska Governor's Mansion.

Iowa. Click [here](#) to read about mold in the Iowa Governor's Mansion.

Louisiana. Click here to read about mold in the Louisiana Governor's Mansion.

Michigan. Click [here](#) to read about mold in the Michigan Governor's Mansion.

Minnesota. Click [here](#) to read about mold in the Minnesota Governor's Mansion.

New Hampshire. Click [here](#) to read about mold in the New Hampshire Governor's Mansion.

New Mexico. Click here to read about mold in the New Mexico Governor's Mansion.

North Carolina. Click [here](#) to read about mold in the North Carolina Governor's Mansion.

North Dakota. Click [here](#) to read about mold in the North Dakota Governor's Mansion.

South Carolina. Click [here](#) to read about mold in the South Carolina Governor's Mansion.

Texas. Click [here](#) to read about mold in the Texas Governor's Mansion and the "[mysterious fire](#)" that occurred.

In many states, governors are no longer living in the Governors' Mansions. Click [here](#) to read the New York Times Article titled "Electing to Sleep Elsewhere."



Repairs Needed in Illinois Governor's Mansion

Efforts are being launched this week to raise private money to pay for a needed \$8.8 million in renovations and repairs to the 160-year-old Illinois Executive Mansion in Springfield.

Although an initial analysis of deteriorating conditions at the mansion estimated minimal repairs will cost \$8.8 million, organizers of the private fundraising campaign expect the figure to be higher when historic restoration experts release a more detailed report later this month. And officials expect the cost of repairs will continue to increase the longer the wait for repairs.

Last year, \$2.4 million in emergency repairs for the mansion was approved but never spent. The mansion's roof was patched last summer to prevent leaks that had continued to damage walls, buckle floors and cause mold to grow in the basement.

Problems with the mansion include roof leaks, water damage, wood decay, faded carpets, peeling paint, and outdated mechanical, electrical, plumbing and heating and cooling systems.

Click [here](#) to read the article.

Click [here](#) for a related article from February 7, 2015.

Click [here](#) for an April 17, 2015 article in the Chicago Tribune.

See *University of Texas study* on page 7

University of Texas to Study Six Central Texas High Schools' Indoor Air Quality

With nearly seven million U.S. children having asthma, the University of Texas at Austin (UT) and the U.S. Environmental Protection Agency (EPA) are taking steps to maintain indoor environments for 120 high school classrooms across central Texas. The EPA recently awarded over \$989,000 to UT Austin's Cockrell School of Engineering to research gaps in information between environmental factors and student health.

"This project will discover innovative and practical solutions to improve our schools," said EPA Regional Administrator Ron Curry. "We want to make sure our schools are healthy places for our children to learn, play and grow."

UT Austin's project, Healthy High School PRIDE (Partnership in Research on Indoor Environments), is a four-year partnership that investigates a wide range of environmental parameters such as noise, lighting and indoor air quality in Texas high schools. The researchers will also spend summer periods testing innovative, low-cost engineering approaches for improving high school interior environments. The goal of the project is to inform decisions related to high school building design, construction, maintenance and operational practices that lead to healthy school environments.

"There is increasing evidence that poor indoor air quality and inadequate classroom ventilation contributes to student illness, absenteeism and decreases in academic performance," said Richard Corsi, Chair of the Department of Civil, Architectural and Environmental Engineering at UT Austin's Cockrell School of Engineering. "With a team of engineering, planning and health professionals, we hope to shed light on how indoor environmental conditions affect students and teachers' health and learning, as well as test low-cost practical solutions to improve indoor air quality. We believe that the critical knowledge we gain over the next four years in Central Texas will eventually be applied to other schools nationally."

The project will also provide a hands-on learning experience for students. High school students will complete workshops related to indoor environmental quality and team-based projects on indoor air quality.



University of Texas to Study Six Central Texas High Schools' Indoor Air Quality (cont'd)

This month EPA is raising awareness and focusing efforts to improve the lives of children and families with asthma. Asthma is a major public health issue, affecting nearly 23 million people and disproportionately affecting low-income and minority communities. The economic impact of asthma amounts to more than \$56 billion per year from direct medical costs and indirect costs, such as missed school and work days.

Americans can take important steps to help control their asthma symptoms and maintain active lifestyles with three simple steps:

1. Identify and avoid environmental asthma triggers. Air pollution, dust mites, secondhand smoke, mold, pests, and pet dander can trigger asthma attacks. Work with your doctor to identify and avoid your personal asthma triggers, since asthma sufferers are affected differently.
2. Create an asthma action plan. An asthma action plan will help you monitor your asthma daily and will offer steps to reduce your exposure to your personal triggers through effective control strategies. Ask your doctor to assist you in creating an asthma action plan.
3. Pay attention to air quality. Exposure to ozone and particle pollution can cause asthma attacks. Check local air quality conditions at <http://airnow.gov> and download an Air Quality Index app for your smart phone.

Click [here](#) to read the article.

Click [here](#) to learn more about this project.

See *Homeowner Discovers Mold* on page 8

Homeowner Discovers Mold after Buying New House (Alabama)

Can you imagine buying a home only to find out about a mold problem soon after you move in?

On Your Side Reporter Ronda Robinson talks to a viewer who says it happened to her.

Tiffany Fields bought her Hueytown home in March.

"Two weeks after I moved in I began to have headaches and I ignored it. In April when I cut my air conditioner on for the first time a horrific smell came from the vents," she said.

Tiffany said she hired a contractor to check it out and showed us invoices where the technician found excessive mold.

Tiffany also emailed several pictures to the newsroom. She said the ducts looked as though they had never been cleaned. Tiffany said her kids are sick and the family is currently unable to live in the home.

She paid for a home inspection and the sellers paid for and HVAC system check. Tiffany provided a receipt dated before she said she moved in that did not mention the mold in the inspection.

According to Realtor.com, if sellers are aware of any serious problems it is best to speak up.

"When it comes to water damage or mold: If you're aware of a leaky basement, a damaged roof or any signs of dampness in your house, you need to let the buyers know about the issue. It's best to provide receipts and insurance claim information so buyers can see how you addressed the issue," the site stated.

The question here is who knew about the mold problem before the home was sold.

Click [here](#) to read the article.

Next Newsletter: July 1, 2015



Mould in Dust – A Forensic Tool for the Future (to help solve crimes)

Researchers from North Carolina State University and the University of Colorado, Boulder, have developed a statistical model that allows them to tell where a dust sample came from within the continental United States based on the DNA of fungi found in the sample.

The primary goal of the research was to develop a new forensic biology tool for law enforcement or archaeologists. "But it may also give us a greater understanding of the invisible ecosystems of microbial life that we know are all around us, but that we don't fully comprehend," says Neal Grantham, a Ph.D. student in statistics at NC State and lead author of a paper on the work.

"Ultimately, we want to have an online tool for law enforcement to run the results of dust samples taken from a piece of clothing, a body, or a vehicle, and get information on where the clothing, body, or vehicle has been," Grantham says.

Click [here](#) to read the article.

Quick Links:

Website: <http://globalindoorhealthnetwork.com>

Health Effects:
<http://www.globalindoorhealthnetwork.com/health-effects>

Position Statement:
<http://www.globalindoorhealthnetwork.com/GIHN-position-statement>
